Chapter II

THE MECHANICAL BIOLOGY OF TO-DAY

IT IS not very long since biologists were commonly classed in two groups—the mechanists and the vitalists. It was assumed that if you were not of the one group you must be of the other. But such clean-cut dichotomy is no longer possible in classifying answers to the riddle of life. A great number, perhaps the majority, of contemporary biologists repudiate both the mechanical and the vitalistic labels, and claim to find some general theory of the nature of living things which combines some of the advantages of both, But there are still among us thorough-going exponents of both extreme views: materialists who proudly expound a thoroughly mechanistic biology; and vitalists who are frankly animists and dualists.

These two groups may be regarded as occupying the extreme positions of a linear scale, in which all other views may be placed in order of their affinities with the two extreme positions. I propose to review this scale of views or theories on the nature of living things; not, of course, attempting to set forth every distinguishable view that seems deserving of attention, but selecting rather the views presented by various prominent biologists, as being each representative of a group of nearly allied views of some one part of the scale. In connexion with each such selected representative, I shall try

to state the arguments or evidences which the author chiefly adduces as grounds for his stand, and also the more important